

Partial sequences for a novel mammalian (human and rat sequences identified) calcium channel subunit which we have labeled as the α_{IH} subunit, and an additional novel human calcium channel which we have labeled as the α_{IH} subunit are provided. Knowledge of the sequence of these two calcium channels permits the localization and recovery of the complete sequence from human cells, and the development of cell lines which express the novel calcium channels of the invention. These cells may be used for identifying compounds capable of acting as agonists or antagonists to the calcium channels.